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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,261

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Josephus Christiaan Maria Hendrix

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

SNYDER, ZACHARY J

ART UNIT

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2889

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,261	<b>Applicant(s)</b> HENDRICX ET AL.	
	<b>Examiner</b> Zachary Snyder	<b>Art Unit</b> 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Amendment***

Receipt is acknowledged of applicant's amendment filed 3/26/2009. Claims 1-6 are pending and an action on the merits is as follows.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. PG Publication 2003/0015949 A1 to Higashi et al.

In regard to claim 1, Higashi discloses in figures 1 and 2 a metal halide lamp (lamp 18, paragraph 30) suitable as projection lamp, in particular as a vehicle headlamp comprising

a discharge vessel (arc tube 3, paragraph 24) surrounded by an outer envelope (outer bulb 19, paragraph 26) with clearance and having a ceramic wall (arc tube made of ceramic, paragraph 24) which encloses a discharge space filled with a filling comprising an inert gas, such as xenon (Xe) (paragraph 26), and an ionizable salt (17, figure 1), wherein in

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said discharge space two electrodes (electrodes 6, 7, figure 1) are arranged whose tips (tips 11, 10, figure 1) have a mutual interspacing so as to define a discharge path between them (shown in figure 1), characterized in that

said ionizable salt is selected from the group consisting of NaI, TII,  $\text{CaI}_2$  and  $\text{XI}_3$ , wherein X is selected from the group consisting of rare earth metals (material 17 made of  $\text{CeI}_3$ , NaI, and TII, paragraph 30, Ce being the rare earth metal).

In regard to claim 2, Higashi discloses the limitations of claim 1 and that X is selected from the group comprising Ce, Pr, Lu, Nd ( $\text{CeI}_3$ , paragraph 30).

In regard to claim 3, Higashi discloses the limitations of claim 1 and that X is Ce and wherein the molar percentage ratio  $\text{CeI}_3/(\text{NaI}+\text{TII} +\text{CaI}_2+\text{CeI}_3)$  lies between 0 and 10%, in particular between 0.5 and 7%, more in particular between 1 and 6 (2.5 mg of  $\text{CeI}_3$ , 3.0 mg of NaI, and 0-15 wt. % of TII, paragraph 30, 0.055 mg of TII is 1 wt. % of total composition, yields mole percents of  $\text{CeI}_3$  at  $4.8 \times 10^{-6}$  moles, NaI at  $0.2 \times 10^{-6}$  moles, and TII at  $0.166 \times 10^{-6}$  moles and therefore a ratio of 3.32%).

In regard to claim 6, Higashi discloses the limitations of claim 1 and that the filling comprises Hg (paragraph 25).

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. PG

Publication 2004/0095076 A1 to Kastle et al.

In regard to claim 1, Kastle discloses a metal halide lamp (ceramic discharge vessel, paragraph 1) suitable as projection lamp, for instance as a vehicle headlamp comprising

a discharge vessel (discharge vessel, paragraph 49) surrounded by an outer envelope (not described, but will be present in the lamp) with clearance and having a ceramic wall (ceramic discharge vessel, paragraph 1) which encloses a discharge space filled with a filling comprising an inert gas, such as xenon (Xe) (buffer gas, paragraph 16), and

an ionizable salt (filling component, paragraph 48), wherein in

said discharge space two electrodes (electrodes, paragraph 49) are arranged whose tips have a mutual interspacing (electrode spacing, paragraph 49) so as to define a discharge path between them, characterized in that

said ionizable salt comprises NaI, TII,  $\text{CaI}_2$  and  $\text{XI}_3$ , wherein X is selected from the group comprising rare earth metals (filling components are NaI,  $\text{CeI}_3$ , and  $\text{CaI}_2$ , paragraph 48).

In regard to claim 2, Kastle discloses the limitations of claim 1 and that is selected from the group comprising Ce, Pr, Lu, Nd (shown in paragraph 48 to be Ce).

In regard to claim 3, Kastle discloses the limitations of claim 1 and that X is Ce and wherein the molar percentage ratio  $\text{CeI}_3/(\text{NaI}+\text{TII} +\text{CaI}_2+\text{CeI}_3)$  lies between 0 and 10%, in particular between 0.5 and 7%, more in particular between 1 and 6 (mol % of  $\text{CeI}_3$  is 10%, paragraph 48).

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In regard to claim 4, Kastle discloses the limitations of claim 1 and that X is Ce and wherein the molar percentage ratio  $\text{CaI}_2/(\text{NaI}+\text{TII}+\text{CaI}_2+\text{CeI}_3)$  lies between 20 and 90%, in particular between 35 and 85%, more in particular between 45 and 80% (mol % of  $\text{CaI}_2$  is 20%, paragraph 48).

In regard to claim 5, Kastle discloses the limitations of claim 1 and that the amount of NaI, TII,  $\text{CaI}_2$  and  $\text{XI}_n$  lies between 0.005 and 0.5 g/cm<sup>3</sup>, in particular between 0.025 and 0.3 g/cm<sup>3</sup>.

The volume of the arc tube is roughly the volume of a cylinder with a diameter of 4 mm and a length of 19.2 mm (paragraph 49). Therefore the volume is 241.152 mm<sup>3</sup>. The fill is ~5mg (paragraph 48), so the amount of the salt is 5 mg / 241.152 mm<sup>3</sup> which is about 0.0207 g/cm<sup>3</sup>.

In regard to claim 6, Kastle discloses the limitations of claim 1 and that the filling comprises Hg (Hg filling, paragraph 48).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary Snyder whose telephone number is (571)270-5291. The examiner can normally be reached on Monday through Thursday, 7:30AM to 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zachary Snyder/  
Examiner, Art Unit 2889

/Toan Ton/  
Supervisory Patent Examiner, Art Unit 2889

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